

IX.3.0B-SYSTEM-UDKBLK SUBROUTINE UDKBLK

Description

Subroutine UDKBLK calculate number of blocks per track for the specified disk type and block size. 1/

Calling Sequence

CALL UDKBLK (DSN, NPUNIT, UNIT, LBLOCK, IPRINT, NBLKS, IPCT, ISTAT)

Argument List

<u>Argument</u>	<u>Input/ Output</u>	<u>Type</u>	<u>Dimension</u>	<u>Description</u>
DSN	Input	C*(*)	1	Data set name; if blank data set name will not be included when printing blocks per track information
NPUNIT	Input	I*4	1	Unit number to which number of blocks per track information will be printed; if zero blocks per track information will be printed using print unit number in common block UIOX
UNIT	Input	A4	1	Disk type (3330, 3350 or 3380)
LBLOCK	Input	I*4	1	Block size in full words
IPRINT	Input	I*4	1	Indicator whether blocks per track information is to be printed: 0 = do not print 1 = print single space 2 = print double space
NBLKS	Output	I*4	1	Number of blocks per track
IPCT	Output	I*4	1	Percent of disk space unused
ISTAT	Output	I*4	1	Status indicator: 0 = no errors 1 = invalid disk type 2 = block size is greater than maximum bytes per track for unit type 3 = block size is greater than maximum bytes per track for machine

Notes:

1/ A record is a group of one or more words.

A block is a group of one or more records.

A track is a group of one or more blocks.

This routine is used when calculating the size of a file by computing the number records per track as follows:

```
records_per_block = block_size / record_length
records_per_track = records_per_block * blocks_per_track
```

```
where block_size is the number of words in a block
      record_length is the number of words in a record
```

The number of tracks needed for the specified number of records can be computed as follows:

```
number_of_tracks = number_of_records / records_per_track
```

The number of records in the specified number of tracks can be computed as follows:

```
number_of_records = number_of_tracks * records_per_track
```